



www.harriswilliams.de

Harris Williams & Co. Ltd is a private limited company authorised and regulated by the Financial Conduct Authority, incorporated under English law with its registered office at 5th Floor, 6 St. Andrew Street, London EC4A 3AE, UK, registered with the Registrar of Companies for England and Wales under company number 7078852. Directors: Mr. Ned Valentine, Mr. Paul Poggi, Mr. Thierry Monjauze and Mr. Aadil Khan.

Harris Williams & Co. Ltd Niederlassung Frankfurt (German branch) is registered in the Commercial Register (Handelsregister) of the Local Court (Amtsgericht) of Frankfurt am Main, Germany, under registration number HRB 96687, having its business address at Bockenheimer Landstrasse 33-35, 60325 Frankfurt am Main, Germany. Permanent Representative (Ständiger Vertreter) of the Branch Niederlassung: Mr. Jeffery H. Perkins.

STRONG MOMENTUM ACROSS THE PACKAGING INDUSTRY



a portfolio company of



has been acquired by



Provider of injection-molded temporary waste storage solutions

TRICORBRAUN

a portfolio company of

chs|capital

has been acquired by



Distributor of value-added rigid packaging solutions



DESIGN. CONNECT. DELIVER.

a portfolio company of



has been acquired by



Provider of flexible packaging solutions, injection-molded fitments, and related filling equipment



METALLIZING

a portfolio company of



has been acquired by



Manufacturer of coated and vacuum metallized paper products



a portfolio company of



has been acquired by



a portfolio company of



Manufacturer of flexible paper-based packaging solutions



a portfolio company of



and



has been acquired by



Manufacturer of solar control films and precision, high-performance coatings



a portfolio company of



has been acquired by



Manufacturer of paper-based protective packaging solutions



a portfolio company of



has been acquired by



Global provider of guiding, winding, slitting and tension control systems for web fed converting applications



a portfolio company of



has been acquired by



Producer of die cut merchandise bags and film substrates

WHAT WE'RE READING

HOW AN INCREASINGLY PATIENT-CENTRIC APPROACH IS IMPACTING COLD CHAIN

Packaging World 5/17/2017

The custom nature of patient-centric treatments introduces new challenges and opportunities for pharmaceutical manufacturers and other stakeholders in the pharma and biologics cold chain, including packaging manufacturers.

Read the full article [here](#).

HEALTHY EATING, SUSTAINABILITY & CONVENIENCE TRENDS AFFECTING PACKAGING INDUSTRY

Packaging Strategies 5/15/2017

Consumer focus on wellness, environmental impact and macroeconomic factors such as the growth of the middle class creating more disposable income are shaping the global packaging market, said Charles D. Yuska, president and CEO, PMMI, The Association for Packaging and Processing Technologies, at a press luncheon during Interpack in Düsseldorf, Germany in early May.

Read the full article [here](#).

PACKS EVOLVE IN ONLINE ARENA

Packaging News 4/7/2017

The role of packaging for products ordered online is very different to its use in store. Tony Corbin looks at how designers and brands are adapting to the unique demands of that sector, including fulfilment, efficiency, wow factor, sustainability, non-conscious priming, and dedication.

Read the full article [here](#).

POSITIONING PACKAGING FILMS FOR THE FUTURE

Labels & Labeling 3/23/2017

With flexible packaging adoption continuing to grow around the world, manufacturers of packaging films are having to develop new structures and compositions to suit the ever-more demanding requirements of brand owners and consumers, and the use of their products in increasingly sophisticated ways. From fresh and frozen produce, to ready meals, pet food, chemicals and industrial products, there are few applications where flexible packaging has not found a use.

Read the full article [here](#).

HOW YOUR PRODUCT'S PACKAGING SPEAKS TO MILLENNIALS

Business.com 3/17/2017

Millennials are shopping more frequently, but they also have greater comparative abilities, since access to most stores is at their fingertips. What does this mean for your company's product packaging? Seldom do we see packaging displayed with the product when shopping online. Does this mean your product's packaging is no longer an important consideration increasing your product's value?

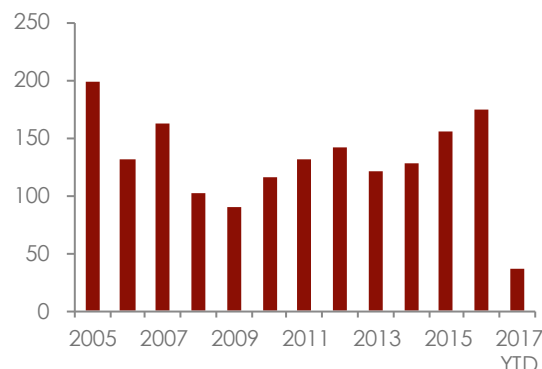
Read the full article [here](#).

KEY THEMES

M&A ACTIVITY IN THE PACKAGING INDUSTRY ⁽⁶⁾

- Strong M&A activity in the packaging space continued through the first quarter of 2017.
 - As of the end of Q1 2017, 182 deals have been announced globally vs. 141 for the prior year LTM period.
 - Also on an LTM basis as of the end of Q1 2017, \$22.1 billion of deal value has been announced globally vs. \$9.5 billion for the prior year LTM period.
- Packaging industry M&A remains robust globally, with the majority of 2017 targets located in Western Europe (47%), North America (28%), and the Asia Pacific region (19%).
- Multiple deals over \$1 billion have been announced or closed in 2017.

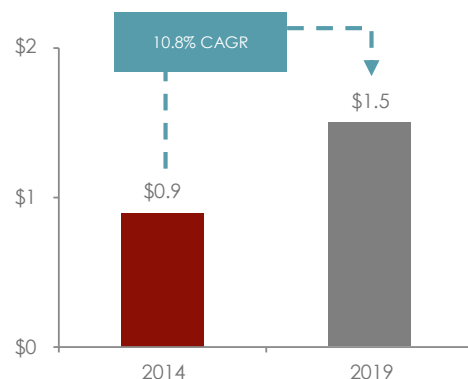
Global Packaging M&A Volume
(announced deals)



THE RISE OF INTELLIGENT PACKAGING ^(7,8)

- Driven primarily by rising consumer engagement and improving technology, demand for intelligent packaging has recently surged and is expected to continue on a high-growth trajectory for the foreseeable future.
- Intelligent packaging senses an attribute of the product and communicates this information to users or triggers active packaging functions.
 - In Europe and North America, strict regulations surrounding the use of active packaging have been encouraging the use of intelligent packaging.
- Other applications of intelligent packaging include time-temperature indicators, freshness indicators, and tracking services.
- Demand for intelligent packaging is projected to total \$1.5 billion in 2019, representing annual growth of 10.8% from \$0.9 billion in 2014.

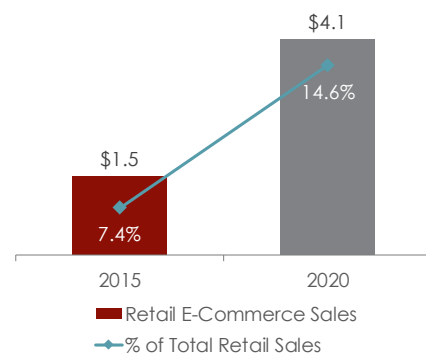
Intelligent Packaging Demand
in the U.S. (\$ in billions)



HOW E-COMMERCE IS CHANGING THE PACKAGING LANDSCAPE ⁽⁹⁾

- E-commerce currently accounts for ~\$1.5 trillion, or ~7.4%, of the ~\$22 trillion global retail market; this share is expected to nearly double by 2020, with more people gaining access to the internet, driving significant change within the packaging industry during this period.
- Packages designed specifically for e-commerce must be durable enough to withstand the often complex supply chains involved in delivering a product to consumers; this, in turn, is expected to drive strong demand for protective packaging.
- Also, with packaging playing a much bigger part in the e-commerce customer experience, there is greater expectation for the secondary packaging to deliver brand values as well as keeping the product safe and secure.

Global E-Commerce Retail Sales
(\$ in trillions)



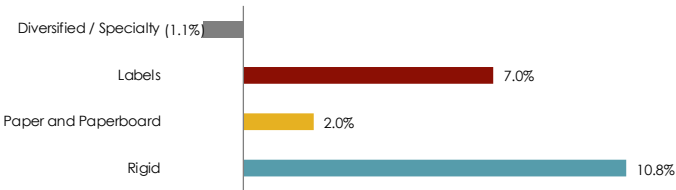
PUBLIC COMPARABLES ⁽⁶⁾

As of May 16, 2017 (\$ in millions, except per share amounts)

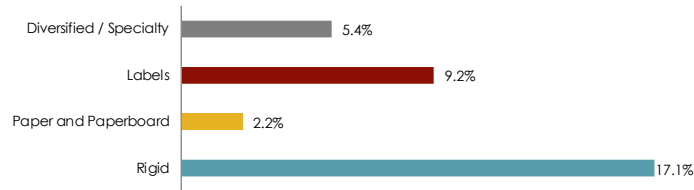
	Current Price	% of LTM High	Mkt Cap	TEV	3-Year Revenue CAGR	FY 2017E			Price / Earnings		TEV / EBITDA			Free Cash Flow Conversion	Net Debt / EBITDA
						Revenue	EBITDA	Margin	FY 2017E	FY 2018P	LTM	FY 2017E	FY 2018P		
Diversified / Specialty															
Amcor	\$11.35	89.8%	\$13,140	\$17,618	(1.6%)	\$9,484	\$1,458	15.4%	20.5x	18.6x	13.3x	12.1x	11.3x	70.5%	3.2x
Berry Global	56.26	98.8%	7,286	13,252	12.9%	7,129	1,337	18.7%	19.6x	17.0x	11.8x	9.9x	9.2x	77.8%	5.1x
Sealed Air Corporation	42.99	84.9%	8,418	12,311	(18.3%)	4,321	825	19.1%	23.9x	17.5x	11.0x	14.9x	13.9x	75.6%	3.5x
Sonoco Products Company	50.96	91.7%	5,065	6,211	(1.1%)	4,853	655	13.5%	18.4x	16.9x	9.8x	9.5x	9.0x	70.0%	1.6x
Aptargroup	82.63	99.5%	5,159	5,804	(2.9%)	2,382	487	20.4%	24.1x	22.1x	12.1x	11.9x	11.3x	71.0%	1.0x
Bemis Company	44.27	83.0%	4,071	5,611	(2.4%)	4,042	576	14.3%	17.3x	15.7x	9.6x	9.7x	9.3x	62.4%	2.6x
Huhtamaki Oyj	38.78	81.5%	4,179	4,815	4.7%	3,406	457	13.4%	17.8x	16.0x	11.6x	10.5x	9.6x	41.3%	1.8x
Greif	57.18	94.4%	2,879	4,412	(6.0%)	3,517	464	13.2%	19.6x	17.6x	10.0x	9.5x	8.9x	76.2%	2.3x
Winpak	43.37	99.6%	2,819	2,610	4.8%	906	210	23.2%	24.8x	23.2x	13.2x	12.4x	11.9x	61.6%	-1.2x
Median		91.7%	\$5,065	\$5,804	(1.6%)	\$4,042	\$576	15.4%	19.6x	17.5x	11.6x	10.5x	9.6x	70.5%	2.3x
Mean		91.5%	\$5,891	\$8,071	(1.1%)	\$4,449	\$719	16.8%	20.7x	18.3x	11.4x	11.2x	10.5x	67.4%	2.2x
Labels															
CCL Industries	\$223.99	95.7%	\$7,894	\$9,650	14.8%	\$3,545	\$728	20.5%	23.0x	20.1x	16.3x	13.3x	12.0x	64.4%	2.8x
Avery Dennison Corporation	84.17	99.6%	7,454	8,846	0.4%	6,402	831	13.0%	18.4x	16.7x	11.0x	10.7x	10.1x	73.1%	1.6x
Multi-Color Corporation	79.30	97.7%	1,344	1,813	5.9%	962	171	17.8%	22.7x	20.7x	11.8x	10.6x	10.1x	73.5%	3.0x
Median		97.7%	\$7,454	\$8,846	5.9%	\$3,545	\$728	17.8%	22.7x	20.1x	11.8x	10.7x	10.1x	73.1%	2.8x
Mean		97.6%	\$5,564	\$6,770	7.0%	\$3,636	\$576	17.1%	21.4x	19.2x	13.0x	11.5x	10.8x	70.3%	2.5x
Paper and Paperboard															
International Paper Company	\$53.06	90.1%	\$21,908	\$32,371	(1.3%)	\$22,742	\$3,909	17.2%	14.7x	12.4x	11.6x	8.3x	7.4x	49.6%	3.7x
WestRock	54.00	95.9%	13,559	19,116	13.6%	14,488	2,249	15.5%	21.4x	15.7x	11.1x	8.5x	7.3x	57.0%	3.1x
Mondi	26.39	99.3%	9,692	14,564	(3.0%)	7,752	1,592	20.5%	15.8x	15.0x	8.1x	9.1x	8.8x	67.7%	0.8x
Packaging Corporation of America	102.88	99.7%	9,692	12,012	2.0%	6,207	1,303	21.0%	17.5x	15.9x	10.1x	9.2x	8.8x	75.7%	2.0x
Smurfit Kappa Group	28.04	98.1%	6,640	9,958	(4.5%)	9,336	1,396	15.0%	12.4x	11.3x	7.4x	7.1x	6.9x	62.2%	2.3x
DS Smith	5.62	90.9%	5,344	6,799	1.7%	6,412	810	12.6%	13.8x	13.0x	8.9x	8.4x	8.1x	55.4%	1.9x
Graphic Packaging Holding Company	14.04	95.5%	4,374	6,625	0.7%	4,328	735	17.0%	19.8x	15.8x	9.3x	9.0x	8.2x	64.6%	3.1x
KapStone Paper and Packaging Corporation	21.29	85.2%	2,061	3,602	12.8%	3,302	431	13.0%	15.6x	12.3x	10.5x	8.4x	7.3x	61.7%	4.4x
P. H. Glatfelter Company	19.10	74.6%	832	1,202	(4.3%)	1,588	167	10.5%	14.2x	11.3x	13.3x	7.2x	6.5x	(70.4%)	3.9x
Median		95.5%	\$6,640	\$9,958	0.7%	\$6,412	\$1,303	15.5%	15.6x	13.0x	10.1x	8.4x	7.4x	61.7%	3.1x
Mean		92.2%	\$8,234	\$11,806	2.0%	\$8,461	\$1,399	15.8%	16.1x	13.6x	10.0x	8.4x	7.7x	47.0%	2.8x
Rigid															
Ball Corporation	\$80.78	98.2%	\$14,141	\$22,076	8.1%	\$10,833	\$1,766	16.3%	18.8x	15.8x	17.1x	12.5x	11.5x	54.0%	5.8x
Owens-Illinois	22.31	99.3%	3,630	9,086	(0.3%)	6,717	1,323	19.7%	9.0x	8.3x	8.0x	6.9x	6.7x	61.5%	4.7x
Silgan Holdings	61.83	95.2%	3,409	5,260	1.3%	4,062	576	14.2%	18.6x	16.3x	11.4x	9.1x	8.2x	63.6%	3.9x
RPC Group	10.46	81.0%	4,342	4,659	34.0%	4,735	728	15.4%	13.9x	12.0x	12.5x	6.4x	6.0x	48.3%	3.0x
Median		96.7%	\$3,986	\$7,173	4.7%	\$5,726	\$1,026	15.8%	16.3x	13.9x	11.9x	8.0x	7.5x	57.7%	4.3x
Mean		93.4%	\$6,380	\$10,270	10.8%	\$6,587	\$1,098	16.4%	15.1x	13.1x	12.3x	8.7x	8.1x	56.9%	4.4x
Overall Median		95.5%	\$5,159	\$6,799	0.7%	\$4,735	\$735	15.5%	18.4x	15.9x	11.1x	9.5x	8.9x	63.6%	3.0x
Overall Mean		92.8%	\$6,773	\$9,611	2.9%	\$6,138	\$1,007	16.4%	18.2x	15.9x	11.2x	9.8x	9.1x	58.7%	2.8x

PUBLIC MARKETS OVERVIEW (6)

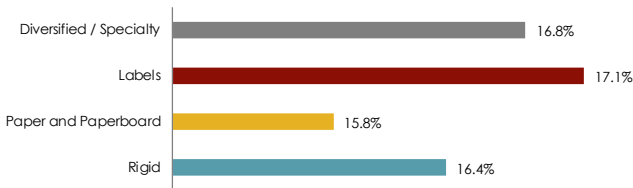
3-YEAR REVENUE CAGR (2014 – 2017E)



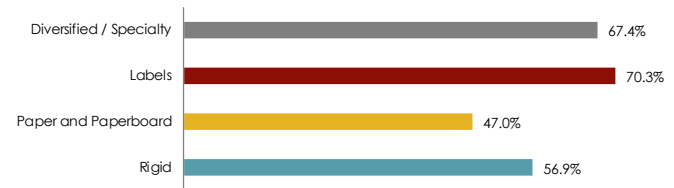
3-YEAR EBITDA CAGR (2014 – 2017E)



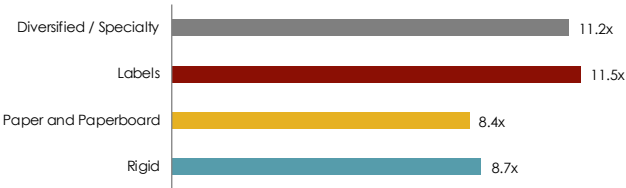
AVERAGE EBITDA MARGIN (2017E)



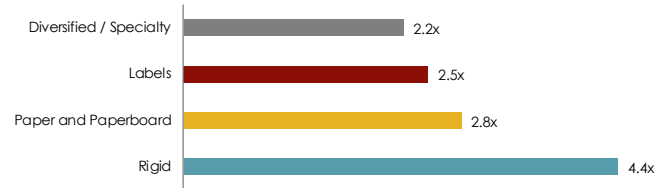
FREE CASH FLOW CONVERSION (2017E)



TOTAL ENTERPRISE VALUE / 2017E EBITDA



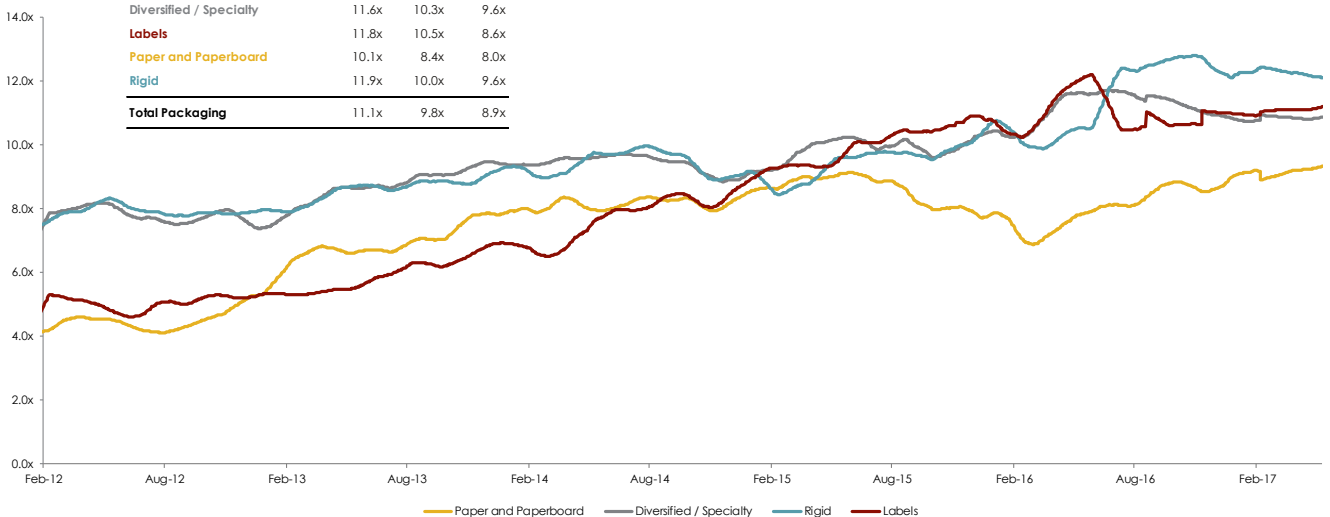
NET DEBT / LTM EBITDA



PUBLIC COMPARABLES (30-DAY ROLLING AVERAGE OF MEDIAN TEV / LTM EBITDA)

Median

	Current	3-Year	5-Year
Diversified / Specialty	11.6x	10.3x	9.6x
Labels	11.8x	10.5x	8.6x
Paper and Paperboard	10.1x	8.4x	8.0x
Rigid	11.9x	10.0x	9.6x
Total Packaging	11.1x	9.8x	8.9x



SELECT M&A ACTIVITY (6,10)

Pending	Transcendia		Transcendia is a manufacturer of custom engineered films for critical product components across a variety of end markets.	Goldman Sachs	
Pending	Charter NEX		Charter NEX Films produces specialty films used in flexible packaging and other critical performance applications.	Leonard Green & Partners	
Pending	Consolidated Container Co.		Consolidated Container develops and manufactures rigid plastic packaging products, specializing in customized mid-run and short-run packaging solutions.	Loews Corporation	
Pending	Trinity Packaging Corp.		Trinity Packaging manufactures plastic carry-out bags and related products.	The Pritzker Group / ProAmpac	
Feb-17	Excelsior Technologies		Excelsior Technologies produces flexible packaging solutions, mainly for food applications, with a packaging technology for microwave steam cooking	Mondi	
Feb-17	Pexco		Pexco designs and manufactures specialty plastics used in medicine, construction, industrial, and retail applications.	Kohlberg & Co. / PPC Industries	
Feb-17	Peninsula		Peninsula Packaging manufactures containers and other packaging products for food storage.	Sonoco	
Feb-17	Lefica Corp.		Lefica Corp. manufactures paper and plastic packaging products including buckets, pails, food containers, and lids.	RPC Group	
Feb-17	Mauser Group NV		Mauser Group manufactures steel and fiber packaging drums and related industrial packaging products and machineries.	Stone Canyon	
Jan-17	Multi Packaging Solutions International		Multi Packaging Solutions International specializes in packaging solutions for the branded and healthcare markets.	WestRock	
Jan-17	Westrock Co - Dispensing Business		Supplies triggers, pumps, sprayers and dispensing closure solutions.	Silgan Holdings	
Dec-16	Innovia Group		Innovia Group manufactures labels and related packaging materials through three divisions: films, security and systems.	CCL Industries	
Dec-16	AstraPak Ltd.		Astrapak manufactures and distributes of an extensive range of rigid and flexible plastic packaging products.	RPC Group	
Nov-16	Novolex Holdings		Novolex Holdings, Inc. manufactures plastic and paper packaging products in North America through a number of brands.	The Carlyle Group	
Nov-16	Burrows Paper Corporation		Burrows Paper Corporation's packaging operations are being acquired by NOVOLEX; its paper operations are being acquired by Twin Rivers Paper.	NOVOLEX / Twin Rivers Paper	
Nov-16	Konrad Hornschuch		Konrad Hornschuch designs and manufactures functional films, wall, floor, and table coverings.	Benecke-Kaliko	
Nov-16	ESE World BV		ESE World provides waste containers and recycling systems.	RPC Group	
Oct-16	Werthan Packaging		Werthan manufactures paper and textile bags.	Saw Mill Capital	
Oct-16	Mactac Americas		Mactac Americas manufactures and distributes specialized pressure sensitive materials.	LINTEC	

HARRIS WILLIAMS & Co.

SOURCES

1. US Energy Information Administration
2. Bureau of Economic Analysis
3. Eurostat
4. Federal Reserve Economic Data
5. University of Michigan
6. Factset
7. Freedonia
8. DOW Packaging
9. Packaging World
10. Mergermarket

DISCLOSURES

Harris Williams & Co. (www.harriswilliams.com) is a preeminent middle market investment bank focused on the advisory needs of clients worldwide. The firm has deep industry knowledge, global transaction expertise, and an unwavering commitment to excellence. Harris Williams & Co. provides sell-side and acquisition advisory, restructuring advisory, board advisory, private placements, and capital markets advisory services.

Harris Williams & Co. Ltd is a private limited company authorised and regulated by the Financial Conduct Authority, incorporated under English law with its registered office at 5th Floor, 6 St. Andrew Street, London EC4A 3AE, UK, registered with the Registrar of Companies for England and Wales under company number 7078852. Directors: Mr. Ned Valentine, Mr. Paul Poggi, Mr. Thierry Monjauze and Mr. Aadil Khan.

Harris Williams & Co. Ltd Niederlassung Frankfurt (German branch) is registered in the Commercial Register (Handelsregister) of the Local Court (Amtsgericht) of Frankfurt am Main, Germany, under registration number HRB 96687, having its business address at Bockenheimer Landstrasse 33-35, 60325 Frankfurt am Main, Germany. Permanent Representative (Ständiger Vertreter) of the Branch Niederlassung: Mr. Jeffery H. Perkins.

THIS REPORT MAY CONTAIN REFERENCES TO REGISTERED TRADEMARKS, SERVICE MARKS AND COPYRIGHTS OWNED BY THIRD-PARTY INFORMATION PROVIDERS. NONE OF THE THIRD-PARTY INFORMATION PROVIDERS IS ENDORSING THE OFFERING OF, AND SHALL NOT IN ANY WAY BE DEEMED AN ISSUER OR UNDERWRITER OF, THE SECURITIES, FINANCIAL INSTRUMENTS OR OTHER INVESTMENTS DISCUSSED IN THIS REPORT, AND SHALL NOT HAVE ANY LIABILITY OR RESPONSIBILITY FOR ANY STATEMENTS MADE IN THE REPORT OR FOR ANY FINANCIAL STATEMENTS, FINANCIAL PROJECTIONS OR OTHER FINANCIAL INFORMATION CONTAINED OR ATTACHED AS AN EXHIBIT TO THE REPORT. FOR MORE INFORMATION ABOUT THE MATERIALS PROVIDED BY SUCH THIRD PARTIES, PLEASE CONTACT US AT THE ABOVE ADDRESSES OR NUMBERS.

The information and views contained in this report were prepared by Harris Williams & Co. ("Harris Williams"). It is not a research report, as such term is defined by applicable law and regulations, and is provided for informational purposes only. It is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. The information contained herein is believed by Harris Williams to be reliable, but Harris Williams makes no representation as to the accuracy or completeness of such information. Harris Williams and/or its affiliates may be market makers or specialists in, act as advisers or lenders to, have positions in and effect transactions in securities of companies mentioned herein and also may provide, may have provided, or may seek to provide investment banking services for those companies. In addition, Harris Williams and/or its affiliates or their respective officers, directors and employees may hold long or short positions in the securities, options thereon or other related financial products of companies discussed herein. Opinions, estimates and projections in this report constitute Harris Williams' judgment and are subject to change without notice. The financial instruments discussed in this report may not be suitable for all investors, and investors must make their own investment decisions using their own independent advisors as they believe necessary and based upon their specific financial situations and investment objectives. Also, past performance is not necessarily indicative of future results. No part of this material may be copied or duplicated in any form or by any means, or redistributed, without Harris Williams' prior written consent.

Copyright© 2017 Harris Williams & Co., all rights reserved.